

# [METAL SILICIDE STRUCTURE AND METHOD OF FORMING THE SAME]

## Abstract

A method of forming a silicide layer is described. A silicon layer is provided. Ions are introduced in the silicon layer. A metal layer is formed on the silicon layer. An annealing process is performed so that the silicon layer reacts with the metal layer to form the metal silicide layer. Thereafter, the unreacted metal layer is removed. The uniformity of the grain size and the grain distribution of the metal silicide layer are improved by introducing the ions in the silicon layer before performing the annealing process, so that sheet resistance of the metal silicide layer is reduced.